



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,154	01/04/2006	Yong Cheol Park	46500-000329/US	8320
30/593 7590 01/05/2010 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
PENDLETON, DIONNE				
ART UNIT		PAPER NUMBER		
2627				
MAIL DATE		DELIVERY MODE		
01/05/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/563,154

**Applicant(s)**

PARK, YONG CHEOL

**Examiner**

DIONNE H. PENDLETON

**Art Unit**

2627

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 9, 18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) 3-8 and 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 9, 18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notes of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ko (US 2002/0105868)** in view of **Takano (US 5,448,728)**.

#### **Regarding claims 1 and 18,**

Ko teaches a pickup (**paragraph [0010]**), controller (inherent), and an overwrite method of an optical disc, comprising the steps of: confirming whether a recording mode applied to the optical disc is a sequential recording mode in which data is recorded sequentially onto sequential recording ranges allocated to a data area of the optical disc (**Ko teaches confirming a recording mode using bit position b2 in figures 8A and 8B for indicating a non-linear replacement recording mode i.e., sequential recording mode; see paragraph [0054]**). Ko fails to expressly teach open and closed sequential recording ranges as claimed, for performing an overwrite therein.

Takano teaches a sequential recording ranges allocated to a data area of the optical disc (**F1, F2 in figure 2**) wherein each of the sequential recording ranges is one of an open sequential recording range having a next writable area or a closed sequential recording range having no writable area (**see the discussion of non-writing**

**state i.e., “open” sequential recording range in column 6, lines 17-23**); performing an overwrite for an overwrite-requested data onto a replacement recording area, wherein if the overwrite is requested in an open sequential recording range (**F2 in figure 2**), a next writable area within the open sequential recording range is identified as the replacement recording area (**column 5, line 64 – column 6, line 10**).

2. **Claims 9 and 19-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ko (US 2002/0105868)** in view of **Takano (US 5,448,728)** as applied to claims 1 and 18, and further in view of **Hwang (US 2004/0246849 A1)**. .

**Regarding claim 9.**

The combined disclosures of Ko and Takano teach the overwrite method of claim 1. Ko and Takano fail to expressly teach that location information of the overwrite-requested area and the replacement-recorded area is recorded as management information.

Hwang teaches that after execution of the overwrite, location information of the overwrite-requested area and the replacement-recorded are is recorded as management information (**paragraph [0061] discloses writing data to disc, verification of data, creation of TDFI and storage of TDFI in TDMA-temporary defect management area**).

It would have been obvious for one of ordinary skill in the art at the time of the invention to alter the combined disclosures of Ko and Takano, per the disclosure of

Hwang, for the purpose of specifying the position of the defect and the substitute area for the defect at the initialization of the disc.

**Regarding claim 19,**

Hwang teaches the apparatus of claim 18, wherein a controller is configured to control the pickup unit to write location information of the overwrite-requested area and the replacement-recorded area is recorded as management information, after execution of the overwrite **(paragraph [0061] discloses creating TDFI and TDDS if a defect is detected, and recording TDFL and TDDS in the TDMA (temporary defect management area), all after the verification of data which is recorded in specified units).**

**Regarding claims 20 and 21,**

Hwang teaches that method of claim 9, and the apparatus of claim 19, wherein the location information is recorded in a temporary management area **(paragraph [0061] discloses the storage of TDFL and TDDS in the TDMA (temporary defect management area) once stored data reached a certain level).**

**Regarding claim 22,**

Ko teaches an optical disc **(Figure 1, Figure 2)** comprising a data area configured to allocate one or more sequential recording ranges **(P1,P2,P3)** in a sequential recording mode in which data is recorded sequentially onto sequential recording ranges allocated to a data area of the optical disc **(Ko teaches a recording**

**mode using bit position b2 in figures 8A and 8B for indicating a non-linear replacement recording mode i.e., sequential recording mode; see paragraph [0054]).** Ko further teaches an optical disc (**Figure 1. Figure 2**) for use in combination with said method. Ko fails to expressly teach open and closed sequential recording ranges as claimed, for performing an overwrite therein.

Takano teaches a sequential recording ranges allocated to a data area of the optical disc (**F1, F2 in figure 2**) wherein each of the sequential recording ranges is one of an open sequential recording range having a next writable area or a closed sequential recording range having no writable area (**see the discussion of non-writing state i.e., “open” sequential recording range in column 6, lines 17-23**); performing an overwrite for an overwrite-requested data onto a replacement recording area, wherein if the overwrite is requested in an open sequential recording range (**F2 in figure 2**), a next writable area within the open sequential recording range is identified as the replacement recording area (**column 5, line 64 – column 6, line 10**).

The combined disclosures of Ko and Takano fail to expressly teach that location information of the overwrite-requested area and the replacement-recorded area is recorded in a temporary management area.

Hwang teaches that the location information may be recorded in a temporary management area (**paragraph [0061] discloses the storage of TDFL and TDDS in the TDMA (temporary defect management area) once stored data reached a certain level**).

It would have been obvious for one of ordinary skill in the art at the time of the invention to alter the combined disclosures of Ko and Takano, per the disclosure of Hwang, for the purpose of specifying the position of the defect and the substitute area for the defect at the initialization of the disc.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims rejected in the official action mailed 6/22/2009 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action. Any inquiry concerning this

communication or earlier communications from the examiner should be directed to DIONNE H. PENDLETON whose telephone number is (571)272-7497. The examiner can normally be reached on 10:30-7:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dionne H Pendleton/  
Examiner, Art Unit 2627

/Thang V. Tran/  
Primary Examiner, Art Unit 2627